What is claimed is:

1. A channel recovery method comprising the steps of:

monitoring whether no synchronization is established for a predetermined period of time between a radio base station and a radio base station control station which constitute a mobile communication system; and

trying channel re-synchronization upon shifting a timing of a channel synchronization clock used for communication between the radio base station and the radio base station control station.

2. A method according to claim 1, wherein

the step of monitoring comprises the steps of:

detecting a state change by monitoring, in a predetermined cycle, operation states of a plurality of cards constituting the radio base station and having different functions;

determining whether or not contents of a state change correspond to a channel disconnection of an operational channel; and

starting a channel synchronization loss detection timer in which a time during which a state change is monitored is set, thereby determining whether or not a channel synchronization loss has occurred, and

the step of trying the channel re-synchronization comprises the steps of:

trying channel re-synchronization when it is determined that a channel synchronization loss has occurred, and

when a channel re-synchronization trial fails, notifying a maintenance/monitoring console of the failure.

3. A method according to claim 2, wherein the step of detecting comprises the steps of

periodically starting a card state monitoring timer which defines a cycle in which an operation state is monitored,

monitoring an operation state of each card when the timer expires,

when a state change is detected, checking whether detected contents are identical to those previously detected, and

storing the contents when the detected contents differ from those previously detected.

4. A method according to claim 2, wherein the step of determining whether or not a disconnection of the operational channel has occurred comprises the steps of

specifying a card whose state change is

detected as a card having a specific function, and

determining whether or not contents of the state change correspond to a channel disconnection during operation of the card.

5. A method according to claim 2, wherein in the step of determining whether or not the channel synchronization loss has occurred, if contents of the state change correspond to a channel disconnection during operation of card, a channel synchronization loss detection timer is started, and a re-synchronization monitoring flag for identifying a card having undergone a channel disconnection is turned on to detect a change in state of the same card within a timer time in a channel synchronization loss detection timer; it is determined that the channel disconnection is temporary, and operation of the channel synchronization loss detection timer is canceled if it is determined that the contents of the state change correspond to a recovery from a channel disconnection and the re-synchronization monitoring flag is ON; and a channel synchronization loss is determined if a change in state of the same card cannot be detected within the timer time in the channel synchronization loss detection timer.

6. A method according to claim 2, wherein the step of trying comprises the steps of

if a channel synchronization loss is determined, starting a synchronization failure timer and a synchronization timing updating timer, the synchronization failure timer defining at least one of a standard for a transmission timing of a channel trouble notification and a maximum trial time for channel re-synchronization, and the synchronization timing updating timer defining a unit time for a channel re-synchronization trial, and

checking a state of the channel upon expiration of the synchronization timing updating timer, and registering a synchronization timing updating timer again if a channel disconnection state is detected, while trying channel re-synchronization, and canceling operation of the synchronization failure timer if a channel has been or is being established when the synchronization timing updating timer expires.

7. A method according to claim 2, wherein the step of notifying comprises the step of, when the synchronization failure timer expires without establishing channel re-synchronization after a plural number of times of channel re-synchronization trials and there is a normal channel, transmitting a channel trouble notification to a maintenance/monitoring console to prompt the console to make a channel check by using the channel, stopping a radio transmission/reception

unit which is performing call connection using the channel having undergone a channel trouble, and switching to another normal radio transmission/reception unit, the synchronization failure timer defining at least one of a standard for a transmission timing of a channel trouble notification and a maximum trial time for channel re-synchronization.

8. A method according to claim 2, wherein the step of notifying comprises the step of, if there is no normal channel, restarting (resuming) a home station and standing by until a channel with a radio base station control station is recovered, in order to prevent a call connection failure due to a channel trouble.

9. A mobile communication system including one maintenance/monitoring console, a plurality of radio base station control stations connected to said maintenance/monitoring console, a plurality of radio base stations connected to said radio base station control stations, and a plurality of mobile units which communicate with said radio base stations,

said radio base station including

channel synchronization loss determining means for determining a channel synchronization loss when no synchronization is established in a channel with one of said radio base station control stations which is

connected to one of said radio base stations for a predetermined period of time,

re-synchronization control means for trying channel re-synchronization upon shifting a timing of a channel synchronization clock used for communication with said radio base station control station connected to said radio base station, and

notifying means for, when channel re-synchronization fails, notifying said maintenance/monitoring console of the failure.

10. A system according to claim 9, wherein

said radio base station further comprises

central control means for monitoring and controlling overall operation of the home station,

a plurality of radio communication means for performing signal transmission/reception in a radio zone,

a plurality of cards constituting the home station and having different functions,

a current-system SDM and a standby-system SDM which constitute a redundant arrangement and store a control program for operation of the home station and operation parameters for monitoring an operation state between the home station and said radio base station control station,

a shared memory in which a read operation parameter is expanded,

monitoring time setting means for monitoring operation states of said plurality of cards, in a predetermined cycle, of the operation parameters stored in said current-system SDM and said standby-system SDM,

synchronization establishing means for defining a maximum trial time for channel re-synchronization,

a monitoring flag for identifying a card having undergone a channel disconnection upon occurrence of a channel disconnection, and

synchronization timing setting means for defining a unit time for a channel re-synchronization trial upon occurrence of a channel synchronization loss, and

said re-synchronization control means comprises re-synchronization control means equal in number to channels and communicates with said radio base station control station through a network.

11. A system according to claim 10, wherein said central control means further comprises comparing means for periodically monitoring an operation state of each card at the expiration of a timer on the basis of said set monitoring time setting means, checking, upon detection of a state change, whether detected contents are identical to those previously detected, and storing the contents if the detected contents differ from those

previously detected.

12. A system according to claim 11, wherein said central control means further comprises

specifying means for determining one of said cards whose state change is detected, and

determining means for determining whether or not contents of the state change correspond to a channel disconnection during operation of said card.

13. A system according to claim 12, wherein

said synchronization loss determining means comprises a synchronization loss detection timer for setting a time during which a state change is monitored, and

said determining means starts a synchronization loss detection timer, if contents of the state change correspond to a channel disconnection during operation of said card, on the basis of said synchronization loss determining means, and turns on the monitoring flag to detect a change in state of said same card within a timer period of the synchronization loss detection timer; cancels operation of the synchronization loss detection timer, if it is determined that the contents of the state change correspond to a recovery from a channel disconnection and the monitoring flag is ON; and determines a channel

synchronization loss if no change in state of said same card is detected within a timer time in the synchronization loss detection timer.

14. A system according to claim 12, wherein said synchronization establishing means comprises a synchronization establishment timer which sets a maximum trial time for channel re-synchronization control upon shifting a timing of a channel synchronization clock, and

said central control means further comprises re-synchronization establishing means for starting the synchronization establishment timer, if a channel synchronization loss is determined, on the basis of said synchronization establishing means, prompting said re-synchronization control means having undergone a channel disconnection to perform channel re-synchronization, causing said re-synchronization control means to set a synchronization timing value for said synchronization timing setting means, registering a synchronization timing updating timer if a channel disconnection state is determined upon checking of a channel state at the end of the synchronization timing, trying channel re-synchronization upon shifting a timing of a channel synchronization clock in communicating with said radio base station control station, and if a channel has been or is being established when the

synchronization timing updating timer expires, canceling operation of the synchronization failure timer upon reception of a channel re-synchronization establishment notification sent out from said re-synchronization control means for which a channel is established.

15. A system according to claim 10, wherein said notifying means transmits a channel trouble notification to a maintenance person to prompt the person to perform a channel check using a normal channel, if any, when the synchronization establishment timer of said synchronization establishing means expires without establishing any channel re-synchronization by a plural number of channel re-synchronization trials, and said system further comprises switching means for stopping said radio communication means which is performing call connection using a channel having undergone a channel trouble, and switching to another radio communication means.

16. A system according to claim 15, wherein said switching means restarts (resumes) the home station and stands by until a channel with said radio base station control station is recovered, in order to prevent a call connection failure due to a channel trouble, if there is no normal channel.

17. A system according to clam 10, wherein said central control means further comprises updating means for downloading the operation parameter from said radio base station control station, writing the parameter in said standby-system SDM, and updating the parameter.